

SECURITY INFORMATION
CENTRAL INTELLIGENCE AGENCY

INFORMATION REPORT

25X1A

COUNTRY : Germany (Sov Zone)

DATE DISTR. 4 JUL 52

SUBJECT : "Stalin's Organ"-- An Experimental
Installation for the Production of
Heavy Water

NO. OF PAGES 2

PLACE
ACQUIRED: 25X1C

NO. OF ENCLS. 1
(LISTED BELOW)

DATE
ACQUIRED BY SOURCE : 25X1A

SUPPLEMENT TO
REPORT NO.
OO-G-00042

DATE OF INFORMATION:

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Explanation of Enclosure (A)

- Heavy water of low concentration passes from catalyst cell one to cells 2, 3, etc, and flows from the last cell as about 95% heavy water. It then goes to an electrolytic cell in the center of the ring of catalyst cells where it is partially decomposed with an electric current. The

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oxygen passes off as waste, while the hydrogen, with a high percentage of deuterium content, is circulated back through the catalyst cells from the last cell to the first in the direction counter to the flow of the water. About 25% of KOH is added to the electrolytic cell as an electrolyte. The water obtained from the electrolytic cell, after being partly electrolyzed, is 99-100% heavy water.

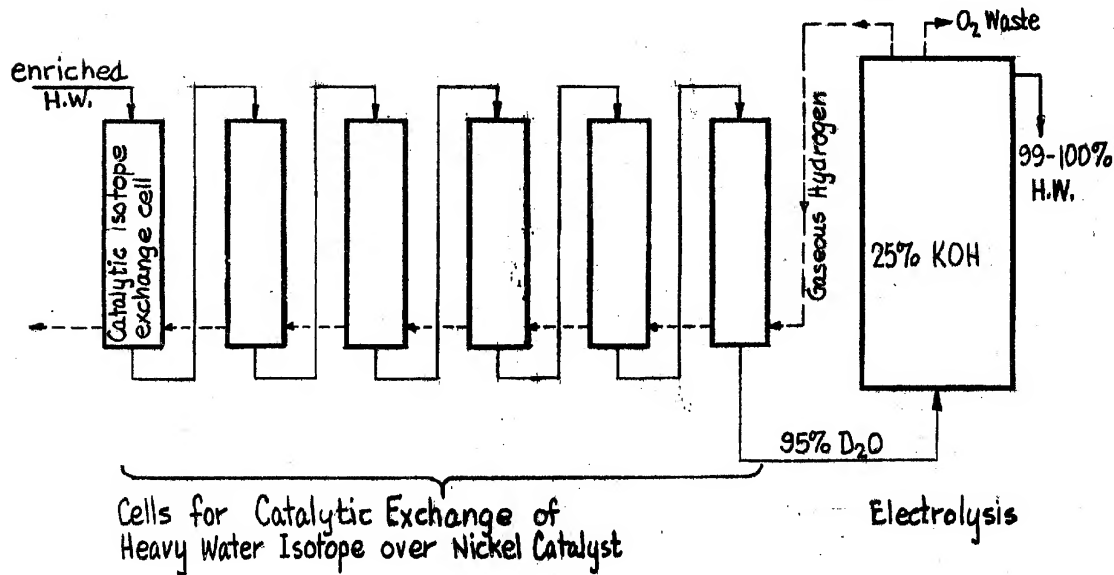
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Enclosure (A) -- Stalin's Organ (Experimental Installation for the Production of Heavy Water)

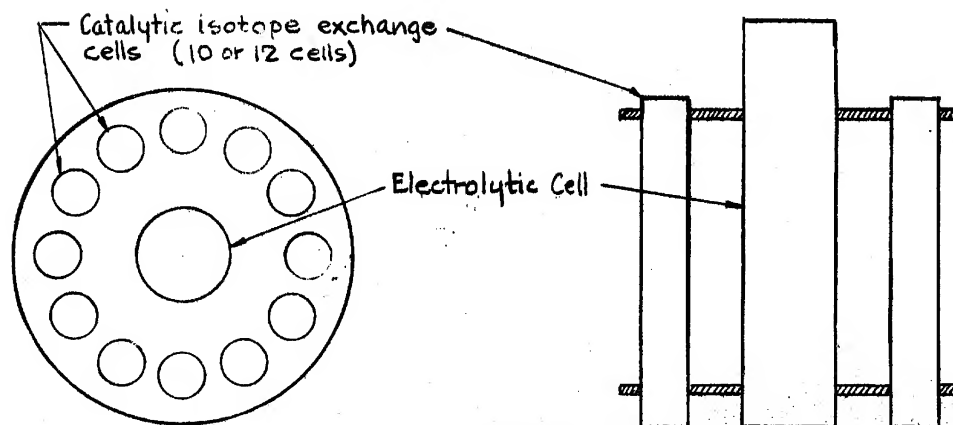
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ENCL. A



DIAGRAMATIC SKETCH OF HEAVY WATER PRODUCTION



PLAN VIEW of Installation

VERTICAL SECTION of INSTALLATION

"STALIN'S ORGAN"

(EXPERIMENTAL INSTALLATION FOR THE PRODUCTION OF HEAVY WATER)

ENCLOSURE (A)

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